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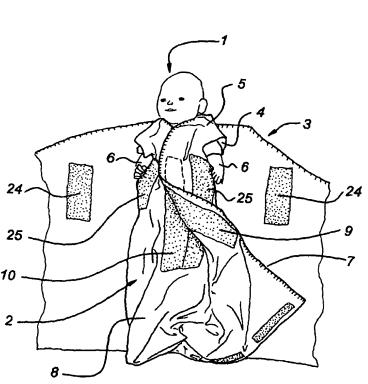
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(54) Title: SWADDLING SET FOR A BABY



(57) Abstract: The invention relates to a swaddling set for a baby. The swaddling set comprises a sleeping bag (2) with armholes (4) and shoulder straps (5), a wrap and fixing means. The fixing means (22) serve for fixing the sleeping bag (2) and the wrap (3) to one another and are provided in such a way that in the use position, when the wrap (3) is wrapped around the sleeping bag (2), the wrap (3) is fixed with respect to the sleeping bag (2) in the longitudinal direction of the sleeping bag. The fixing means (22) can comprise a sewn seam extending along the back section of the sleeping The sleeping bag (2) can be provided with touch-and-close strips (25) beneath the armholes, at the front, at the location of the baby's upper arms, whilst the wrap (3) is provided on the inside thereof with strips (24) that interact in a touch-and-close manner with said touch-and-close strips in such a way that in the use position the arms of the swaddled baby are held alongside the body.

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SWADDLING SET FOR A BABY

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The present invention relates to a swaddling set for a baby, comprising a wrap.

It is generally known to wrap young babies relatively tightly in a wrap. This gives the baby a feeling of security, as if it were being held firmly by its mother. A baby swaddled in a wrap, which in this context is also referred to as a 'swaddling blanket, is generally calm and sleeps well. This method of swaddling has been used from time immemorial and is still used by mothers to take their baby with them to work, frequently on the land, so that the mother is able to carry out her work on the land while she has her baby relatively close to her.

However, there are also some risks associated with swaddling a young baby in a wrap, which risks can arise in particular when this swaddling is used during the night and the baby is left on its own for a prolonged period. Specifically, the problem is that the baby can slip down into the wrap and its respiration can then be impeded and it can even choke. If swaddling is carried out properly, in particular sufficiently tightly, it is probable that this problem can be reliably precluded, but this demands some skill and, furthermore, has the associated risk that the baby is enclosed too tightly in the wrap.

The aim of the present invention is to provide a swaddling set in which the baby can be swaddled safely by wrapping in a wrap and which set is also very suitable for use during prolonged uninterrupted periods, such as during the night, without interim checking.

The abovementioned aim is achieved according to the invention by the provision of a swaddling set for a baby, comprising:

- a sleeping bag with armholes and shoulder straps;
- a wrap; and
- 25 fixing means for fixing the sleeping bag and the wrap to one another, which fixing means are provided in such a way that in the use position, when the wrap is wrapped around the sleeping bag, the wrap is fixed with respect to the sleeping bag in the longitudinal direction of the sleeping bag.

Because the baby is in the sleeping bag with its arms protruding outwards through the armholes and because the sleeping bag and the wrap are fixed to one another, the baby is prevented from being able to slip down in the wrap. After all, the arms protruding through the armholes prevent slipping down into the sleeping bag and the fact that the sleeping bag is fixed to the wrap prevents the sleeping bag being able to slip down into the wrap

wrapped around it. The fixing means can provide permanent fixing of the wrap to a sleeping bag, for example can comprise a sewn seam. The fixing means can, however, also provide non-permanent fixing, in which context consideration can be given to, for example, buttons, zips or touch-and-close means, by means of which the sleeping bag and the wrap can be fixed to one another in a detachable manner.

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In order as reliably as possible to prevent the sleeping bag, containing the baby, slipping down into the wrap in the use position it is preferable according to the invention if the fixing means comprise at least one joining zone extending in the longitudinal direction of the sleeping bag, along the trunk section thereof. The reason for this is that, in the swaddled position, the baby's head will protrude from the swaddling set and it is of primary importance that the baby's trunk, which will be in the trunk section of the sleeping bag, is not able to shift relative to the wrap. Whether or not the bottom of the wrap, that is to say that portion thereof that is located by the baby's feet, is able to shift relative to the sleeping bag is of lesser importance since this will not lead to a dangerous situation to any great extent. Such a joining zone can, for example, extend along the chest side of the trunk section or along one or both sides of the trunk section. The joining zone can furthermore provide a continuous or interrupted join. Thus, for example, there can be fixing of the sleeping bag to the wrap over the entire joining zone or over sections thereof.

With a view to ease of use of the swaddling set, it is preferable according to the invention if the fixing means comprise at least one sewn seam which extends in the longitudinal direction of the sleeping bag along the back section and which joins the sleeping bag and the wrap to one another. In this way it is ensured that the sleeping bag and the wrap are always permanently joined in a predetermined position with respect to one another. This can be convenient in particular should the baby struggle when it is swaddled in the swaddling set or at least intentionally or unintentionally opposes swaddling. With a swaddling set of this type it is necessary merely to lay down the entire set, to place the baby on its back in the sleeping bag, to close the sleeping bag and to wrap the wrap around it.

In order to be able to achieve some swaddling effect with the sleeping bag itself, it is preferable according to the invention if the sleeping bag has a closure at the front extending in the longitudinal direction thereof, comprising two overlapping flap sections, the inner flap section, viewed in the transverse direction of the sleeping bag, having a length such that, in the use position, the flap extends to between the baby's back and the back section of the sleeping bag. In this way the baby can, as it were, be wrapped up using the inner flap

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section. For the purposes of wrapping up using this central inner flap section, but also, apart from this, merely for the purpose of easily closing the sleeping bag and optionally also in order to obtain a swaddling effect with the sleeping bag itself, it is advantageous according to the invention if the sleeping bag is provided at the front with a touch-andclose closure. A touch-and-close closure is easy to close and, furthermore, enables adjustability in the transverse direction of the sleeping bag, it then being possible, as it were, to close the sleeping bag more tightly or less tightly around the baby's body. For this purpose the touch-and-close closure will preferably have a width in the width direction of the sleeping bag that also allows such adjustability. Such a touch-and-close closure can consist of two complementary touch-and-close strips, but it is also very readily conceivable on one side to make use of only one touch-and-close strip, specifically the relatively harder touch-and-close strip, and on the other side not to provide a separate relatively softer touchand-close strip but to make use of a material that has the softer touch-and-close characteristics in order to be able to interact with said relatively harder touch-and-close strip in a touch-and-close manner. These two methods of using a touch-and-close closure or touch-and-close join can, incidentally, also be employed in other positions in the swaddling set, or, more generally, in any position where a touch-and-close join or closure could be used.

In order to facilitate wrapping the baby up using the wrap and when doing so reliably to ensure that the baby, in particular the baby's face, cannot disappear into the wrap, it is preferable according to the invention if the wrap has a triangular basic shape with a base extending essentially transversely to the sleeping bag and a top corner that is located in the region of the head of the baby to be swaddled.

With this arrangement the so-called top corner can be truncated at the level of the shoulders of the baby to be swaddled. This prevents a loose flap section being located behind the baby's head.

In order further to facilitate wrapping up in the wrap, it is preferable according to the invention if one of the side corners adjoining the base is truncated in such a way that, in the wrapped use position, the respective side of the wrap does not extend beyond the front of the body of the baby to be swaddled. What is achieved in this way is that this one side of the wrap merely has to be wrapped over the front of the baby's body and does not have to be wrapped round the back. The other side of the wrap can then be wrapped around the baby in order to achieve the wrap effect.

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In order to prevent possible slipping down into the wrap and more particularly to prevent the baby's arms becoming fixed in an unpleasant position in the swaddling set, it is preferable according to the invention if the sleeping bag is provided with touch-and-close strips below the armholes, at the front, at the location of the upper arms of the baby to be swaddled and if the wrap is provided on the inside thereof with strips that interact with said touch-and-close strips in a touch-and-close manner in such a way that, in the use position, the arms of the swaddled baby are held in a position lying alongside the body.

The present invention will be explained in more detail with reference to an illustrative embodiment shown in the drawing. In the drawing:

Fig. 1 shows a diagrammatic plan and perspective view of a swaddling set according to the invention that has been laid open, with a baby therein;

Fig. 2 shows a view corresponding to Fig. 1, but with the sleeping bag partly folded closed;

Fig. 3 shows a view corresponding to Figs 1 and 2, but now with one side of the wrap partially wrapped over the baby.

Fig. 4 shows a view corresponding to that in Figs 1, 2 and 3 but now with the swaddling set in the completely swaddled position; and

Fig. 5 shows a sectional view along the arrows V in Fig. 4.

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With reference to Figs 1 - 5, the swaddling set according to the invention, that is intended for a baby 1, is made up of essentially a sleeping bag 2 and a wrap 3.

The sleeping bag 2 is of the type which has two armholes 4 and two shoulder straps 5. To place a baby 1 in such a sleeping bag, the baby's arms 6 are placed through the armholes and the two so-called flap sections 7 and 8 of the sleeping bag are placed against one another and attached to one another. The shoulder straps 5 then fit over the shoulders and the baby's head protrudes from the sleeping bag between the shoulder straps. Sleeping bags of this type are generally known, in particular for babies. With such sleeping bags the so-called flap sections 7 and 8 are conventionally joined to one another, abutting one another, by means of a zip fastener, which closes from top to bottom. As can be seen in particular in Fig. 2, in the case of the sleeping bag according to the invention, the flap sections 7 and 8 wrap over one another. However, it should be clear that a conventional sleeping bag of the type just described could also be used, or that wrapping of the so-called flap sections 7 and 8 over one another is not necessary but is advantageous. Specifically, wrapping the flap sections 7 and 8 over one another offers a facility for closing the sleeping

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bag tightly around the baby 1 contained therein. Without making use of the wrap, this already provides a sort of swaddling effect from the start, if the flap sections 7 and 8 can now also be joined to one another in the transverse peripheral direction of the sleeping bag such that they are adjustable with respect to one another. Such an adjustable, or, if preferred, adaptable method of joining to one another can be achieved, for example, by providing a set of buttons, but according to the invention is highly advantageously achieved by making use of a touch-and-close closure, at least one of the effective parts of which extends over some distance in the transverse direction or peripheral direction of the sleeping bag. These complementary touch-and-close strips, which interact with one another, are indicated by 9 and 10. Touch-and-close strip 9 is on the inside of the wrapover flap 7 and touch-and-close strip 10 is on the outside of the inner flap section 8. As is illustrated in particular in Figs 1 and 5, the so-called inner flap section 8 of the sleeping bag, viewed in the transverse direction of the sleeping bag, has a length such that, in the use position, this flap 8 extends to between the baby's back and the back section of the sleeping bag. This has the result that the swaddling effect that can already be achieved with the sleeping bag itself is improved. In order to facilitate positioning of the inner flap section 8 between the baby's back 11 and the back section 12 of the sleeping bag, the sleeping bag can be opened and closed at the bottom, in particular on the half of the other flap 7 (the right-hand half in Fig. 1) by means of a touch-and-close join 13, 14.

With reference to, in particular, Fig. 1, the wrap in the swaddling set according to the invention advantageously has a triangular basic shape with a base 15 (the lower edge) extending essentially transversely to the sleeping bag and a truncated top corner 16 that is at the level of the shoulders of the baby 1 to be swaddled in the set. As can also be seen in Fig. 1, the right-hand corner and the left-hand corner of the wrap 3 are also truncated. The right-hand corner that belongs to part 17 of the wrap that is located furthest to the inside when wrapping is substantially truncated with this arrangement, such that, in the wrapped use position, this corner will not extend beyond the front of the body of the baby to be swaddled. The reason for this is to facilitate wrapping up. In order to illustrate this in more detail, the truncated side 18 that is on the right in Fig. 1 is indicated in more detail in Fig. 5. As far as the truncated side 20 of the wrap 3 shown on the left in Fig. 1 is concerned, the truncation is less essential. However, one advantage of truncating the side 20 is that the length of the wrap, and thus the wrap corner length to be produced when swaddling, is shortened.

The sleeping bag 2 and wrap 3 are fixed to one another by means of fixing means 22. The fixing means 22 can be, for example, touch-and-close means. However, in the embodiment shown in the figures it has been elected to use a sewn seam join 22 which extends in an interrupted or uninterrupted rectangular pattern over the back section 12 of the sleeping bag. The joining zone 21 produced by the sewn seam 22 advantageously extends over essentially the entire length of the sleeping bag. In this way the sleeping bag and wrap can be kept neatly positioned with respect to one another. However, in order to prevent the baby from being able to disappear into the wrap when the swaddling combination is in the wrapped position it suffices if the joining zone extends over at least the trunk section 23 of the baby.

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As can clearly be seen in particular in Figs 2 and 3, in addition to being fixed by the sewn seam 22 the sleeping bag 2 and wrap 3 can also be fixed to one another by means of two touch-and-close closures, each having a touch-and-close strip 24, 25. The touch-andclose strip 25 is always provided on the outside of the sleeping bag, on the front of the sleeping bag at the location of the arms, in any event of at least the upper arms of the baby to be swaddled, below the armholes. The touch-and-close strips 24 are provided on the inside of the wrap 3 in a position such that they are able to engage in a touch-and-close manner with the touch-and-close strips 25 in the wrapped position. What can be achieved by means of the touch-and-close strips 24, 25 is that in the swaddled position the baby's arms are held in a fixed position alongside the baby's trunk 23. This is illustrated in more detail in particular with reference to Fig. 5, where the touch-and-close strips 24 and 25 are shown some distance apart for the sake of clarity of the drawing. However, it should be clear that in the swaddled position the touch-and-close strips 24, 25 will engage with one another in a touch-and-close manner. Adjustability of the touch-and-close joins 24 and 25 can be achieved by allowing at least one of the touch-and-close strips 24, 25 to extend over a sufficient length in the peripheral direction of the sleeping bag. With regard to the touchand-close joins 24, 25 it is furthermore pointed out that these can be regarded as so-called fixing means for fixing the sleeping bag and the wrap to one another and that it is optionally conceivable that fixing by means of the sewn seam 22 is dispensed with completely.

Although not shown, it should be clear that it is very readily conceivable to provide a touch-and-close closure strip close to the left-hand edge 20 of the wrap 3, or optionally to provide a different type of closure in order to hold the flap section 20 fixed on the wrap in

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the wrapped position.

The overall procedure when swaddling a baby will be, or at least can be, as follows:

The wrap 3 and the sleeping bag 2 are unfolded as shown in Fig. 1 and the baby 1 is placed thereon. The baby's arms 6 are then placed through the armholes 4, the inner flap section 8 of the sleeping bag is placed between the baby's back 11 and the back section 12 of the sleeping bag and the outer flap 7 of the sleeping bag is folded over the inner flap 8 in order to produce the touch-and-close joins 9 and 10, preferably in such a way that the sleeping bag 2 encloses the baby 1 relatively tightly. One arm 6 of the baby is then first placed by the baby's trunk in order then to produce one touch-and-close join 24, 25 and this procedure is then repeated for the other arm 6 and other touch-and-close join 24, 25. Finally, the large, or outer, flap, the left-hand section 30 in Fig. 1, is wrapped around the whole.

CLAIMS

- 1. Swaddling set for a baby, comprising:
- a sleeping bag with armholes and shoulder straps;
- 5 a wrap; and
 - fixing means for fixing the sleeping bag and the wrap to one another, which fixing means are provided in such a way that in the use position, when the wrap is wrapped around the sleeping bag, the wrap is fixed with respect to the sleeping bag in the longitudinal direction of the sleeping bag.

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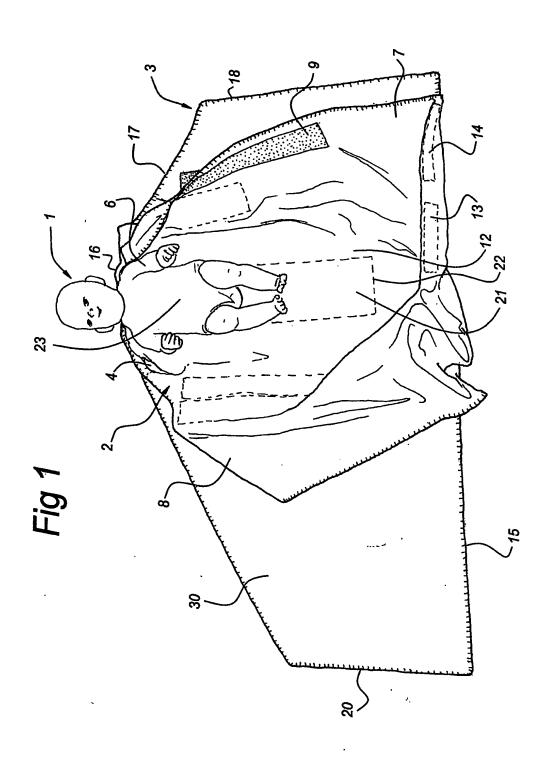
- 2. Swaddling set according to Claim 1, wherein the fixing means comprise at least one joining zone extending in the longitudinal direction of the sleeping bag, over the trunk section thereof.
- 3. Swaddling set according to one of the preceding claims, wherein the fixing means comprise at least one sewn seam which extends in the longitudinal direction of the sleeping bag along the back section and which joins the sleeping bag and the wrap to one another.
 - 4. Swaddling set according to one of the preceding claims, wherein the sleeping bag has a closure at the front extending in the longitudinal direction thereof, comprising two overlapping flap sections, the inner flap section, viewed in the transverse direction, having a length such that, in the use position, the flap extends to between the baby's back and the back section of the sleeping bag.
- 5. Swaddling set according to one of the preceding claims, wherein the sleeping bag is provided on the front with a touch-and-close closure.
 - 6. Swaddling set according to one of the preceding claims, wherein the wrap has a triangular basic shape with a base extending essentially transversely to the sleeping bag and a top corner that is located in the region of the head of the baby to be swaddled.
 - 7. Swaddling set according to Claim 6, wherein the top corner is truncated at the level of the shoulders of the baby to be swaddled.

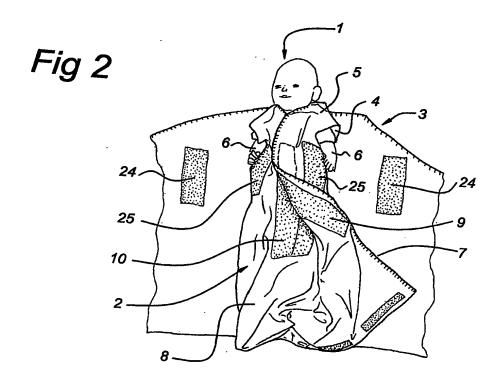
8. Swaddling set according to Claim 6 or 7, wherein one of the side corners adjoining the base is truncated in such a way that, in the wrapped use position, the respective side of the wrap does not extend beyond the front of the body of the baby to be swaddled.

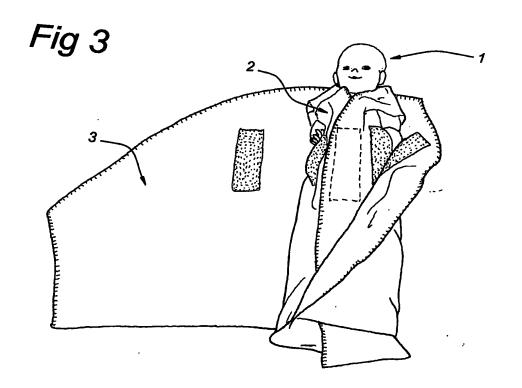
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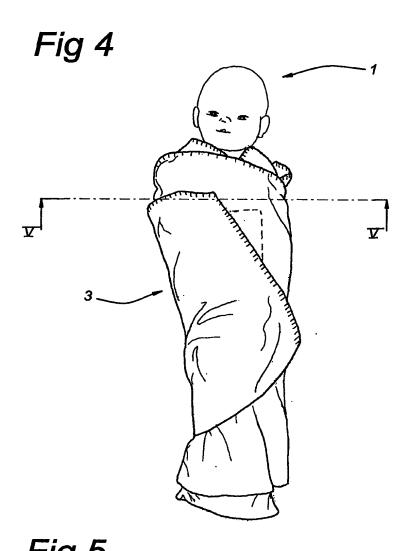
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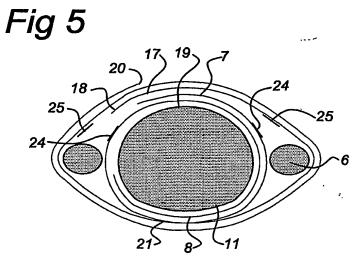
9. Swaddling set according to one of the preceding claims, wherein the sleeping bag is provided with touch-and-close strips below the armholes, at the front, at the location of the upper arms of the baby to be swaddled and wherein the wrap is provided on the inside thereof with strips that interact with said touch-and-close strips in a touch-and-close manner in such a way that, in the use position, the arms of the swaddled baby are held in a position lying alongside the body.











INTERNATIONAL SEARCH REPORT

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a. classification of subject matter IPC 7 A41B13/06 A47G9/02								
According to International Patent Classification (IPC) or to both national classification and IPC								
B. FIELDS	SEARCHED							
Minimum documentation searched (classification system followed by classification symbols) IPC 7 A41B A47G								
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched								
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ								
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT							
Category °	Citation of document, with indication, where appropriate, of the relevant	vant passages Helevant to claim No.						
A	US 5 058 226 A (C. CROSBY) 22 October 1991 (1991-10-22) column 1, last paragraph -column 2 20; claim 1; figures 1-3	1,2 2, line						
A	US 4 172 300 A (D. M. MILLER) 30 October 1979 (1979-10-30) column 2, line 37 -column 4, line	41						
А	US 1 940 224 A (W. J. MUNRO) 19 December 1933 (1933-12-19) page 1, column 1, line 25 -page 2 1, paragraph 1; figure 1	, column						
Further documents are listed in the continuation of box C. Patent family members are listed in annex.								
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INTERNATIONAL SEARCH REPORT

information on patent family members

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5058226	Α	22-10-1991	NONE		
US 4172300	Α	30-10-1979	NONE		·
US 1940224	. A	19-12-1933	NONE		

Form PCT/ISA/210 (patent family annex) (July 1992)

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